BRUHAT BANGALORE MAHANAGARA PALIKE

Project:Improvements to Roads and Drains at Bhuvaneshwarinagara 20 R Cross in Ward No 06 Byatarayanapura Sub Division

Est Cost: 25.00Lakhs

Sl. N	Description of Item	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
1	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neately dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWTD SR 2016-17)								
		Cum							
	New CC drain								
	1st Cross		2	30.00	0.95	0.90	51.30		
	2nd Cross		2	57.00	0.95	0.90	97.47		
	3rd Cross		2	43.00	0.95	0.90	73.53		
	Culverts		8	6.00	2.00	0.90	86.40		
							308.70	186.92	**57702.20**
	Basic rate	**82**							
	Loading and unloading with 10km lead= 68+2.5x1.28x10 = 100	**100**							
	Add Area Weightage 6%	**4.92**							
	Final Rate	**186.92**							
2	KSRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.2 of PW,P&IWTD S.R 2016-17)								
	Bed Concrete	Cum							
	1st Cross		2	30.00	0.95	0.10	5.70		
	2nd Cross		2	57.00	0.95	0.10	10.83		
	3rd Cross		2	43.00	0.95	0.10	8.17		
	Culverts		8	6.00	2.00	0.15	14.40		
							39.10	5348.76	**209136.52**
	Basic rate	**5046**							
	Area Weightage 6%	**302.76**							
	Final Rate	**5348.76**							
3	KSRB 4-6.1: Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specifications. Specifcation No. KBS 4.6.2 (P.No.15, I.No.4.28 of PW, P&IWTD SR 2016-17)								
	Bottom Slab	Sqm							
	New CC Drain								
	1st Cross		4	30.00	--	0.15	18.00		
	2nd Cross		4	57.00	--	0.15	34.20		
	3rd Cross		4	43.00	--	0.15	25.80		
							78.00	244.86	**19099.08**
	Basic rate	**231**							
	Area Weightage 6%	**13.86**							
	Final Rate	**244.86**							

Sl. N	Description of Item	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
4	KSRB 4-6.4: Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surfaces such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification No.KBS 4.6.2 (P.No.15, I.No.4.31 of PW,P&IWTD SR 2016-17)								
	Side Walls	Sqm							
	New CC Drain								
	1st Cross		8	30.00	--	0.600	144.00		
	2nd Cross		8	57.00	--	0.600	273.60		
	3rd Cross		8	43.00	--	0.600	206.40		
							624.00	310.58	**193801.92**
	Basic rate	**293**							
	Area Weightage 6%	**17.58**							
	Final Rate	**310.58**							
5	Providing and laying cement concrete using 20mm and downsize granite coarse aggregates and fine aggregates of ready mixed concrete (RMC) for RCC works laid in 15cms thick layers and well compacted vibrating, curing, finishing with necessary cement mortar, with all lead and lifts etc., complete (exclusive of cpost of steel and fabricaton charges) Ready Mixed Cement Concrete M 20 for Raft foundation, Column, Footing, main and secondary beams. (P.No.18, I.No.4.48 of PW, P&IWTD SR 2016-17)								
	Culvert	Cum							
	Bottom Slab								
	New CC Drain								
	1st Cross		2	30.00	0.75	0.15	6.75		
			2	57.00	0.75	0.15	12.83		
			2	43.00	0.75	0.15	9.68		
	Side Walls								
	New CC Drain								
	1st Cross		4	30.00	0.15	0.60	10.80		
			4	57.00	0.15	0.60	20.52		
			4	43.00	0.15	0.60	15.48		
							76.05	6231.74	**473923.83**
	Basic rate	**5879**							
	Area Weightage 6%	**352.74**							
	Final Rate	**6231.74**							
6	KSRB - 4.9.2: Providing TMT steel reinforcement Fe500 for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3. (P.No.17, I.No.4.46.2 of PW, P&IWTD SR 2016-17)								
	Consider 47Kgs/cum for item No. only RCC Drain Qty	Tonne		76.05	0.047	--	3.58		
							3.58	64243.42	**229991.44**
	Basic rate	**60607**							
	Area Weightage 6%	**3636.42**							
	Final Rate	**64243.42**							
7	KSRB 5.2-3: Providing and constructing granite size stone masonry in foundation cement mortor 1:6, stone hammered dressed in courses not less than 20cms high, bond stones at 2m. apart in each course including cost of materaials, labour, curing complete as per specifications. Specifcation No. KBS 5.1.13. (P.No.23, I.No.5.6 of PW, P&IWTD S.R 2016-17)								
		Sqm							
	Culverts		16	6.00	0.60	0.92	52.99		
							52.99	4438.22	**235190.15**
	Basic rate	**4187**							

Sl. N	Description of Item	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
	Area Weightage 6%	**251.22**							
	Final Rate	**4438.22**							
8	KSRB 15.1.1 Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. (P.No.113, I.No.15.1 of PW, P&IWTD S.R 2016-17)								
		Sqm							
	Culverts		16	6.00	--	0.92	88.32		
							88.32	102.82	**9081.06**
	Basic rate	**97**							
	Area Weightage 6%	**5.82**							
	Final Rate	**102.82**							
9	KSRB 4-1.6: Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.6 of PW,P&IWTD S.R 2016-17)								
		Cum							
	Culverts		16	6.00	0.60	0.10	5.76		
							5.76	5767.46	**33220.57**
	Basic rate	**5441**							
	Area Weightage 6%	**326.46**							
	Final Rate	**5767.46**							
10	Providing and fixing **RCC Precast cover slab of 250mm thick** for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
		Sqm							
	Culverts		8	6.00	1.80	--	86.40		
							86.40	5317.00	**459388.80**
	Data Rate =5317								
11	KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.90 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to embankment location and complete as per specifications. MORTH Specification No.301 (P.No.143, I.No.19.14 of PW,P&IWTD S.R 2016-17)								
	Road Portion	Cum							
	1st Cross		1	30.00	5.00	0.23	34.50		
	2nd Cross		1	57.00	5.20	0.23	68.17		
	3rd Cross		1	43.00	5.00	0.23	49.45		
							152.12	148.76	**22629.67**
	Basic rate	**46**							
	Loading and unloading with 10km lead= 68+2.5x1.28x10 = 100	**100**							
	Add Area Weightage 6%	**2.76**							
	Final Rate	**148.76**							

Sl. N	Description of Item	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
12	KSRRB M 400-17, Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechaniqal mix plant carriage ' of mixed Material by tipper to site, laying in uniform layers with paver in sub- base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density.complete as per specifications. MORTH Specification No. 406 (P.No.158, I.No.20.18 of PW,P&IWTD SR 2016-17)								
	Road Portion	Cum							
			1	30.00	5.00	0.23	34.50		
			1	57.00	5.20	0.23	68.17		
			1	43.00	5.00	0.23	49.45		
							152.12	1768.08	**268963.87**
	Basic rate	**1668**							
	Area Weightage 6%	**100.08**							
	Final Rate	**1768.08**							
13	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6 of PW,P&IWTD SR 2016-17)								
	Road Portion	Cum							
			1	30.00	5.00	--	150.00		
			1	57.00	5.20	--	296.40		
			1	43.00	5.00	--	215.00		
							661.40	27.56	**18228.18**
	Basic rate	**26**							
	Area Weightage 6%	**1.56**							
	Final Rate	**27.56**							
14	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7 of PW,P&IWTD SR of 2016-17)								
	20th R Cross	Sqm							
	For Laying BC								
	1st Cross		1	30.00	5.00	--	150.00		
	2nd Cross		1	57.00	5.20	--	296.40		
	3rd Cross		1	43.00	5.00	--	215.00		
							661.40	12.72	**8413.01**
	Basic rate	**12**							
	Area Weightage 6%	**0.72**							
	Final Rate	**12.72**							
15	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6 in PW,P&IWTD S.R 2016-17)								
	20th R Cross	Cum							
	1st Cross		1	30.00	5.00	0.04	6.00		
	2nd Cross		1	57.00	5.20	0.04	11.86		
	3rd Cross		1	43.00	5.00	0.04	8.60		
							26.46	8118.54	**214784.09**
	Basic rate	**7659**							
	Area Weightage 6%	**459.54**							
	Final Rate	**8118.54**							

Sl. N	Description of Item	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
16	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803.(P.No.185, I.No.24.15 of PW,P&IWTD SR 2016-17)								
	Edge line	Sqm	2.5	130.00	0.10	--	32.50		
							32.50	542.72	**17638.40**
	Basic rate	**512**							
	Area Weightage 6%	**30.72**							
	Final Rate	**542.72**							
								Total Construction Cost	**2471192.790**
17		**Cost towards Design Report , PMC / Third Party inspection LS**							**24711.93**
19								**Miscellaneous and rounding off**	**4095.28**
								Total	**2500000.00**

Certificate.

1 The workspot was inspected and Provisions made in the estimate are adequate and necessary.
2 Work Spot comes under BBMP limits.
3 The estimate based on PWD CSR for the year 2016-17.
4 This work is not split up.
5 These works are not taken up in any other grants and free from Defect Liability Period.
6 Earlier Improvements taken up in the proposed roads are recorded in earlier road history.

ಸಹಾಯಕ ಅಭಿಯಂತರರು
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-26

Technical Sanction
Accorded For ASRS:ondarchearly
Head of A/C PI271
CER NO : 667 Dt 03.09.18

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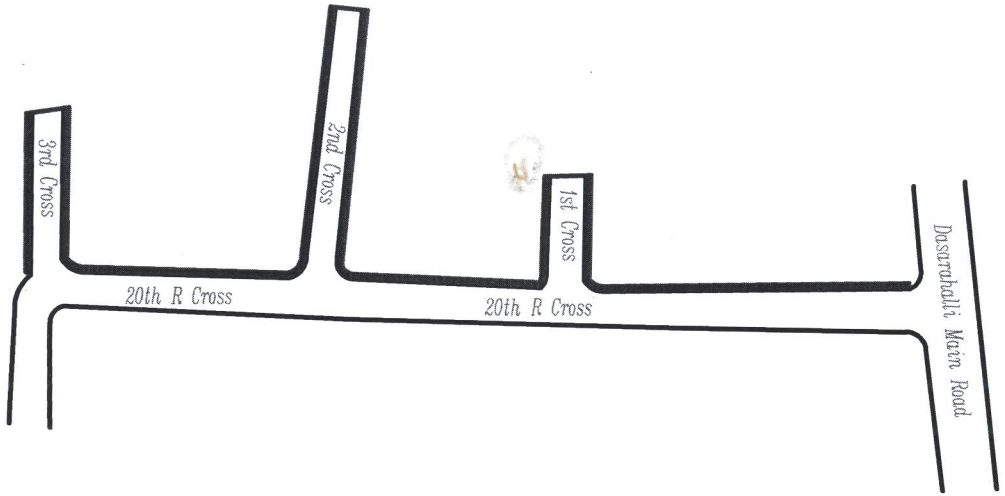
BRUHAT BANGALORE MAHANAGARA PALIKE

Improvements to Roads and Drains at Bhuvaneshwarinagara 20 R Cross in Ward No 06 Byatarayanapura Sub Division



Road Name	Length
1st Cross	24m
2nd Cross	55m
3rd Cross	33m

Bhuvaneshwari nagar

NOTE:-
1. ALL DIMENSION & LEVELS ARE Mts. UNLESS OTHERWISE MENTIONED.

ಸಹಾಯಕ ಅಭಿಯಂತರರು
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

DATE	No. OF PRINTS	PRINTS ISSUED TO	SIGN

DATE	REVISION	DESCRIPTIONS	SIGN

LEGEND:-
Asphalt Road
Drain

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿ.ಬಿ.ಎಂ.ಪಿ., ಬೆಂಗಳೂರು-26

TITLE: STRIP PLAN 1/1

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